U. S. Senate Republican Policy Committee

Larry E. Craig, Chairman   Jade West, Staff Director

Legislative Notice

No. 35   February 26, 2002

Senate Amendment No. 2917 to S. 517 – "Energy Policy Act of 2002"

Calendar No. 65.

S. 517, the underlying bill, was reported from the Committee on Energy and Natural Resources on June 5, 2001. Senate Amendment No. 2917 was offered to the bill by Senators Daschle and Bingaman on February 15, 2002, as a substitute and is now pending.

NOTEWORTHY

- On February 15, 2002, the Majority Leader got unanimous consent to call up S. 517 (the National Laboratories Partnership Improvement Act of 2001) and offer an amendment in the nature of a substitute, SA 2917, the Energy Policy Act of 2002. The agreement provides that the Majority Leader, after consultation with the Republican Leader, may at any time proceed to the consideration of the legislation. That action is expected this week upon completion of S. 565. The substitute is now pending and it and the bill are amendable in two degrees.

- This Legislative Notice describes the Daschle substitute, SA 2917, which is a revised version of S. 1766 (Calendar No. 259), the original Daschle/Bingaman comprehensive energy legislation. S. 1766 was not reported from the Energy Committee but was placed directly on the Calendar by the Majority Leader in December.

- The Daschle substitute authorizes extension of the Price Anderson Act only to Department of Energy Contractors, and thus not to Nuclear Regulatory Commission licensees; includes Senator Kerry's CAFE language imposing a 35 miles per gallon (mpg) standard by 2013, and expanding the definition of "light truck" to include most Sport Utility Vehicles (SUVs); and requires a Renewable Portfolio Standard (RPS) for electric utilities requiring generation of new renewable electricity equal to 2.5 percent of total sales in 2005, increasing to 10 percent of total sales by 2020.

- The substitute makes no provision for opening ANWR to oil and gas exploration and development. It also does not contain revenue provisions. Rather, Senators Baucus and Grassley intend to offer a $16 billion/10 year package adopted by voice vote by the Finance Committee on

February 13. No offsets are provided; however, a Democrat amendment may be offered to reauthorize Superfund taxes as the offset.

HIGHLIGHTS

The Daschle/Bingaman Subsitute

The Daschle/Bingaman substitute contains 436 pages of legislation divided into 18 titles. A printed version of the complete text of the substitute is only available in the *Congressional Record* (see pages S909-S969; the text also may be found on the Energy and Natural Resources Committee website).

The Energy Committee Republican staff has prepared summaries of the bill's major issues, a section-by-section analysis of SA 2917, and a side-by-side comparison of the House, Democrat Senate, Republican Senate, and Bush National Energy proposals. These documents are available from the RPC.

Highlights of key provisions are as follows.

- Authorizes **extension of the Price Anderson Act** only to Department of Energy Contractors. Nuclear Regulatory Commission licensees, primarily commercial nuclear reactors, are not included, thereby exposing those licensees to potentially huge liability damages in the event of an accident.

- Includes Senator Kerry's language requiring the National Highway Traffic Safety Administration (NHTSA) to prescribe **fuel economy standards** for passenger automobiles and light trucks manufactured in model years 2005-2013 to achieve a combined fleet-average fuel economy of 35 miles per gallon (mpg) by 2013. Under the provision, passenger cars must achieve a standard of 33.2 mpg and light trucks must achieve 26.3 mpg by 2010. The provision expands the definition of "light truck" to include vehicles up to 10,000 pounds, thus capturing almost all commercially manufactured Sport Utility Vehicles (SUVs).

- Requires a **Renewable Portfolio Standard (RPS)** for electric utilities for generation of new renewable electricity equal to 2.5 percent of total sales in 2005, increasing by 0.5 percent/year to 10 percent of total sales by 2020. The provision would increase total U.S. renewable generation to about 20 percent by 2020. The Daschle/Bingaman substitute would penalize retailers (those who sell directly to consumers) who fail to meet the new standard.

- Mandates the use of 5 billion gallons of **ethanol** annually by the year 2012, bans the use of **MethylTertiaryButylEther (MTBE)** in motor gasoline, retains the 2-percent **oxygenate mandate** for gasoline but allows Governors to petition for waiver of the 2-percent oxygenate requirement.

Finance Committee Provisions

On February 13, 2002, the Senate Finance Committee adopted, by voice vote, a $16 billion package of energy-related tax provisions which were, among other things, designed to encourage 1) domestic energy production, 2) energy efficiency and conservation, and 3) development of alternative fuels and vehicles.

The Finance-reported measure, entitled the "Energy Tax Incentive Act of 2002," was not included in the underlying energy package offered by Majority Leader Daschle, but rather will be offered as an amendment by Senators Baucus and Grassley during floor debate.

The legislation, as reported, does not contain any provisions to offset the $16 billion revenue impact. It is expected that an amendment will be offered on the floor to add a reauthorization of the taxes used to finance the Comprehensive Environmental Response, Compensation, and Liability Act, the so-called Superfund taxes, which expired in 1995. This offset is extremely controversial, as opponents argue these taxes should only be addressed within the context of overall Superfund reforms. Another possibility for an offset would be increased customs fees. Again, increasing these fees outside legislation to address border security would be extremely contentious.

Another outstanding issue is the transfer of the 2.5 cents per gallon of excise tax on gasohol that currently is retained in the General Fund to the Highway Trust Fund. While the Joint Committee on Taxation estimated this would have no impact on revenues, it may have an impact on Revenue-Adjusted Budget Authority available to fund the National Highway System.

Domestic Energy Production: The committee proposal includes almost $5 billion in incentives to oil and gas producers, including new tax credits for marginal oil and gas wells as well as changes to the depreciation and expensing rules of these assets.

Energy Efficiency and Conservation: The package includes numerous tax credits and allowances for, among other things, the construction of energy-efficient homes, the purchase of energy efficient appliances, and the manufacture of fuel cell technologies. These credits and allowances are estimated to reduce revenues by $3 billion over the next 10 years.

Alternative Fuel and Vehicle Incentives: The proposal includes $2 billion in new and modified incentives to automakers and gasohol producers to increase gasohol production and encourage the sale and purchase of alternative fuel vehicles.

Miscellaneous: The remaining $6 billion in revenue impact is divided between an assortment of provisions including clean coal technologies and electric industry restructuring.

For a full description of the Finance package, please visit the JCT website at http://www.house.gov/jct/.

BACKGROUND

There is no committee report to accompany SA 2917, and no bill was considered by the Energy Committee. As a consequence, no coherent summary of the need for the legislation, the existing statutes altered by the amendment, or language creating wholly new statutory authorities is available from the Energy Committee's majority staff.

In March 1999, the Organization of Petroleum Exporting Countries (OPEC) determined that oil prices, hovering around $10 per barrel at the time, were too low and acted to restrict the production of crude oil. The effect was almost immediate and by the end of that year oil prices had skyrocketed to a high of $34 per barrel before falling back into the high $20 per barrel range. Home heating oil prices also rose significantly during the cold winter of 1999-2000

Motor gasoline prices, often below $1 per gallon during the 1990s, began to rise rapidly and approached $2.50 per gallon in parts of the United States. Those prices, it was ultimately determined by the Department of Energy, were caused by a combination of higher crude oil prices, regional reformulated gasoline requirements, and major refining and transportation equipment failures that resulted in spot product shortages.

In 2000 natural gas prices rose about 30 percent. At the same time, an ill-advised electricity deregulation program enacted by the California State Legislature a number of years ago induced a rapid increase in electricity prices by decontrolling wholesale electricity rates while maintaining limitations on the amount retail electricity rates could rise in response to wholesale rates. California's attempt to deregulate electricity led to the bankruptcy of two of the state's electricity utilities, Southern California Edison and Pacific Gas and Electric.

All of these market place perturbations encouraged the Senate Energy Committee to begin deliberations on solutions to the nation's energy woes in 1999, and continuing into the beginning of the 107th Congress. In 2001, the new President established a White House energy task force, chaired by Vice President Cheney, to develop the National Energy Policy. The President's plan was completed in the spring of 2001. The Energy Committee continued its search for a comprehensive legislative approach to addressing the energy issue.

When the Senate changed hands in June 2001, the Energy Committee continued to search for solutions but the new Majority Leader took responsibility for creation of energy legislation out of the hands of the Energy Committee, and instead crafted the legislation currently before the Senate without benefit of hearings and without the normal process of committee decision making. [CRS Issue Brief: “Energy Policy: Setting the Stage for the Current Debate,” January 24, 2002, IB10080]

BILL PROVISIONS

Energy Policy Act of 2002 (S. Amdt. 2917)

DIVISION A – RELIABLE AND DIVERSE POWER GENERATION AND TRANSMISSION

TITLE I – REGIONAL COORDINATION

Makes it U.S. policy to encourage States to coordinate, on a regional basis, energy policies and energy infrastructure planning. The Department of Energy (DOE) is to give technical assistance to states for this policy; also establishes an annual conference on regional energy coordination.

TITLE II – ELECTRICITY

Subtitle A – Amendments to the Federal Power Act

Amends definitions of "electric utility" and "transmitting utility" in the Federal Power Act, expands Federal Energy Regulatory Commission (FERC) jurisdiction to include mergers of holding companies that own utilities, mergers of generation-only utilities, and acquisitions of natural gas companies by electric companies. Allows FERC to use market-based rates, and allows the refund effective date under section 206 of the Federal Power Act to begin at the time of filing of a complaint.

Allows FERC to require that transmission service rates charged by unregulated transmitting utilities are comparable to what they charge themselves, and that terms and conditions are comparable to those required of other utilities. Specifies exempted utilities. Authorizes FERC to establish and enforce (with deference to the North American Electric Reliability Council or other such organizations, and to Regional Transmission Organizations) mandatory standards to ensure reliability.

Requires FERC to establish an electronic system to provide information about the availability and price of wholesale electric energy and transmission services. Requires transmitting utilities to provide service for generators that use wind or solar exclusively at rates and terms that do not penalize the generator for scheduling deviations by use of imbalance penalties.

Subtitle B – Amendments to the Public Utility Holding Company Act

Repeals the Public Utility Holding Company Act of 1935 (PUHCA) and provides for federal and state access to holding company books and records (in the case of states, without first initiating a proceeding).

Subtitle C – Amendments to the Public Utility Regulatory Policies Act of 1978

States must consider a standard for real-time pricing of electricity, as well as standards for competitive access to the distribution grid, competitive pricing of service, and simplified standard contracts for interconnection; for interconnection of distributed generation to the distribution grid; for minimum fuel and technology diversity; and for fossil fuel efficiency. The Secretary may provide technical assistance to the States for implementation.

Repeals mandatory purchase and sale requirements and ownership limitations under the Public Utility Regulatory Policies Act of 1978 and requires electric suppliers to provide net metering services for on-site generators fueled by renewable energy resources and fuel cells.

Subtitle D – Consumer Protections

Requires Federal Trade Commission (FTC) rules providing for the disclosure to consumers of price, additional charges, and (as feasible) the type of electric generation and environmental emissions produced in generating the electricity sold. Also, requires FTC rules protecting the privacy of consumer information obtained in connection with sale or delivery of electricity.

Subtitle E – Renewable Energy and Rural Construction Grants

Expands the incentive program available to municipal and cooperative utilities for producing electricity from renewable energy sources. Incentives are funded through administrative fees on transactions of renewable energy credits issued under Sec. 265 (Renewable Portfolio Standard). It also, requires that a certain percentage – 3 percent in fiscal year (FY) 2002 increasing to 7.5 percent in FY 2010 – of the total electricity purchased by the federal government be generated by a renewable energy source and requires the Secretary of the Interior to develop a pilot program for the development of wind and solar energy on federal lands.

Requires each retail supplier to use renewable energy technologies to generate specified annual percentages of electricity sold. The percentages, which are in addition to any renewable generation currently in existence, would ramp up from 2.5 percent in 2005 to 10 percent in 2020 – the so-called Renewable Portfolio Standard (RPS).

TITLE III – HYDROELECTRIC RELICENSING

Requires Federal resource agencies to adopt alternative conditions proposed by an applicant for a hydroelectric relicensing program if the applicant can demonstrate that (1) such condition is equally or more protective of the environment than conditions suggested by the agency, (2) is based on sound science, and (3) would be more cost-effective or would result in less loss of generating capacity. The title also provides that the FERC must enforce all mandatory conditions and fishway prescriptions imposed by the resource agencies (i.e., Department of the Interior, the Department of Commerce, and the Department of Agriculture) if they place direct and discernible duties on the licensee. Further, the title calls for development of coordinated regulations and procedures governing hydroelectric relicensing among FERC, the Department of the Interior, the Department of Commerce, the Department of Agriculture and interested States.

TITLE IV – INDIAN ENERGY

Establishes a comprehensive Indian energy program at the DOE to assist tribes in meeting their energy needs and expanding opportunities to develop energy resources on tribal lands. The section provides for a grant program and a loan guarantee program for Indian energy development. It also provides that federal agencies may give a preference to purchasing Indian energy.

Allows an Indian tribe to lease directly land and rights-of-way for energy facilities, without case-by-case review by the Secretary of the Interior, if the tribe develops, and the Secretary approves, tribal regulations, and the term of the agreement does not exceed 30 years.

TITLE V – NUCLEAR POWER

Subtitle A – Price-Anderson Act Reauthorization

Extends DOE's authority to indemnify its contractors indefinitely; increases the maximum amount of DOE contractor indemnification from $9.43 billion under current law to $10 billion; and increases the limit on liability for nuclear incidents outside of the United States from $100 million to $500 million. Does not extend protections afforded by Price-Anderson to Nuclear Regulatory Commission Licensees – who constitute most of U.S. commercial nuclear reactors.

Subtitle B – Miscellaneous Provisions

Sets a limitation on the amount of uranium that can be sold by DOE from its uranium stockpile. Makes certain transfers by the United States Enrichment Corporation exempt from this limit.

DIVISION B – DOMESTIC OIL AND GAS PRODUCTION AND TRANSPORTATION

TITLE VI – OIL AND GAS PRODUCTION

Permanently authorizes the operation of the Strategic Petroleum Reserve (SPR) and the ability of the United States to cooperate, through the International Energy Agency, with other oil-consuming nations to plan for and respond to any potential oil supply disruption. Directs that the SPR be filled to its current capacity, requires a report on infrastructure bottlenecks that might impede drawdowns from the SPR, and requires recommendations for increasing the capacity of the SPR.

Alters the acreage cap for oil and gas leases on federal lands so that producing leases are not included in the existing statewide acreage limitation. Also, requires an evaluation of the impact of existing federal and state tax and royalty policies on development of domestic oil and gas resources and development of alternative policies to optimize recovery of domestic resources while ensuring environmental protection.

TITLE VII – NATURAL GAS PIPELINES

Subtitle A – Alaska Natural Gas Pipeline

Recommends expediting approval of projects to bring Alaska natural gas to Lower 48 consumers, to assure that open access is provided to any pipeline that may be built, and to provide a federal financial incentive for the expeditious development of a commercial project.

Establishes an expedited process for FERC to consider and act on any application to construct a pipeline to transport Alaska natural gas pursuant to Section 7 of the Natural Gas Act. This process would provide an alternative to the process currently available under the Alaska Natural Gas Transportation Act of 1976, but would not affect the rights of any party to proceed under that Act. Two types of applications are contemplated, one that would cover the U.S. portion of a natural gas pipeline system that would transport natural gas from the North Slope of Alaska to Alberta, Canada, and a second type that would cover the U.S. portion of a pipeline system from the Alberta Hub to consumers in the Lower 48. Stipulates that federal loan guarantees may cover up to 80 percent of any loan to build the pipeline (and a total loan of up to $10 billion).

Subtitle B – Operating Pipelines

Generally prevents an operating natural gas pipeline from being placed on the National Register of Historic Places (which might delay safety upgrades or other improvements to the pipeline).

DIVISION C – DIVERSIFYING ENERGY DEMAND AND IMPROVING EFFICIENCY

TITLE VIII – FUELS AND VEHICLES

Subtitle A–Increased Vehicle Fuel Efficiency

Requires the Secretary of Transportation, after consultation with the EPA Administrator, to prescribe average fuel economy standards for passenger automobiles and light trucks beginning in model year 2005 so as to achieve a combined fleet-average fuel economy of 35 miles per gallon or greater by model year 2013. Requires manufacturers to have achieved 33.2 mpg for passenger cars and 26.3 mpg for light trucks and SUVs by 2010. Sets minimum fuel economy standards in statute if the Secretary of Transportation does not promulgate regulations under this section within 18 months. Provides that the Secretary may promulgate combined fuel economy standards for all automobiles after 2010. Expands definition of "light trucks" to include vehicles between 8,500 and 10,000 pounds gross vehicle weight. Authorizes $25 million for each of fiscal years 2003 through 2015 to DOT to carry out the provisions of this section. EPA must examine on an ongoing basis the accuracy of fuel economy testing procedures and recommend to Congress how to reduce any discrepancy from actual consumption to less than 5 percent.

Requires DOT to promulgate new regulations within three years to reduce the "aggressivity" (risk of serious injury to passengers in other vehicles) of light trucks by 30 percent from model year 2002 levels and requires review of such regulations every five years thereafter.

Requires DOT, in consultation with EPA, to establish a system under which manufacturers who accrue fuel economy credits may transfer those credits among the manufacturer's fleets (foreign, domestic, autos, light trucks) or sell those credits to other manufacturers who can apply such credits for purposes of compliance with fuel economy mandates. Requires participating manufacturers to report monthly sales of vehicles to EPA and make manufacturer-specific credit data available via the Internet. Sets civil penalty for failure to meet CAFE standards to the greater of the existing penalty ($5 multiplied by the number of vehicles sold multiplied by each 0.1 mpg needed for compliance), or 1.5 times the previous-year weighted average cost of fuel economy credits multiplied by the number of credits needed for compliance.

Subtitle B – Alternative and Renewable Fuels

Provides incentives regarding the use of alternative and renewable fuels. Two major components: the first requires federal fleets with alternative fuel capability to use alternative fuels for at least 50 percent of the total annual volume used in such vehicles by 2003 and 75 percent of the total annual volume of fuel used by 2005; the second major component requires that the EPA mandate that an increasing amount of renewable fuel (including ethanol and biodiesel) be blended into gasoline, starting with 2 billion gallons per year in 2003 and increasing to 5 billion gallons per year in 2012. In 2013 and thereafter, the percentage use of ethanol remains the same as in 2012. Refiners and blenders who use a greater amount of ethanol can earn tradeable credits that expire after one year, if not used or traded. A mechanism for States to request EPA to lower the national ethanol requirement is also provided.

Subtitle C – Federal Reformulated Fuels

Authorizes $200 million from the Leaking Underground Storage Trust Fund for the remediation of groundwater contamination from methyl tertiary butyl ether (MTBE). Authorizes $50 million for FY 2002, and $30 million for FY 2003-2007 for conducting inspections, issuing orders, and actions under the Solid Waste Disposal Act for MTBE contamination of groundwater. Also bans the use of MTBE within four years after the date of enactment of this subtitle. Provides that States may act earlier if they wish, provides how State Governors may waive the 2-percent oxygenate requirement for reformulated gasoline, and requires EPA to conduct a study of the public health effects of ethyl tertiary butyl ether (ETBE), and submit a report to Congress within two years. Also, authorizes $250 million for each of fiscal years 2002 through 2004 to assist MTBE producers in conversion of their facilities to produce other fuel additives.

Subtitle D – Additional Fuel Efficiency Measures

Requires the head of each federal agency to determine the average fuel economy of all automobiles in the agency’s fleet of automobiles, thereby establishing a baseline for this section and requires that the procurement of new automobiles be managed so that, by September 30, 2003, the average fuel economy of new automobiles in the agency’s fleet is at least 1 mile per gallon higher than the baseline. Further requires that the average fuel economy of new automobile be not less than 3 miles per gallon higher than the baseline by September 30, 2005. Exceptions for vehicles designed for combat-related missions, law enforcement work, and emergency rescue work.

TITLE IX – ENERGY EFFICIENCY AND ASSISTANCE TO LOW INCOME CONSUMERS

Subtitle A – Low-Income Assistance and State Energy Programs

Increases the annual authorization for the LIHEAP grant program to $3.4 billion; the authorization for emergency funds to $1 billion and the authorization for training and technical assistance to $750,000 through FY 2005. Provides annual authorizations for the weatherization program of $325 million for FY 2003 increasing to $500 million in FY 2005 and provides an annual authorization for state energy conservation programs of $100 million in FY 2003 increasing to $125 million in FY 2005. Amends planning requirements and goals.

Subtitle B - Federal Energy Efficiency

Changes the baseline for measuring federal energy performance from 1985 to 2000 and requires a 20 percent improvement by 2011 and requires federal buildings to be metered or sub-metered by October 1, 2004 and requires agencies to develop plans to use real-time electricity consumption data to reduce energy costs and consumption.

Directs the Architect of the Capitol to develop and implement an energy and water conservation strategy for Congressional buildings and contains a requirement that state-of-the-art energy efficiency technologies be used in the Capitol Visitors Center.

Subtitle C – Industrial Efficiency and Consumer and Commercial Products

Authorizes the Secretary of Energy to enter into voluntary agreements with industry sectors or individual companies to reduce the energy consumed per unit of production in the industrial process by a minimum of 2.5 percent a year and provides authority for the Secretary to establish energy conservation standards for commercial products.

Directs the FTC to consider changes to improve the effectiveness of energy labels on consumer products and directs the Secretary to prescribe labeling requirements to products added by this subtitle including ceiling fans, vending machines, commercial refrigerators and freezers, and unit heaters. Legislates standards for exit signs, torchere lamps, and low-voltage dry-type transformers.

Imposes a 13 SEER energy conservation standard for central air conditioning units and central air conditioning heat pumps, except "window-box" small air conditioners and heat pumps that would be subject to a 12 SEER standard. Allows the Secretary of Energy to postpone until 2010 the 13 SEER standard for certain product types if compliance is neither feasible nor economically justifiable. Requires final rule by DOE in 2006 to determine whether further amendments to standard are needed for products manufactured after 2011.

Subtitle D – Housing Efficiency

Increases the amount of assistance for providing public services involving energy conservation or efficiency by 10 percent, and changes from 20 percent to 30 percent the amount that property value covered by mortgage insurance may be increased due to the installation of a solar energy system.

DIVISION D – INTEGRATION OF ENERGY POLICY AND CLIMATE CHANGE POLICY

TITLE X – CLIMATE CHANGE POLICY FORMULATION

Subtitle A – Global Warming

Expresses the Sense of the Congress that the U.S. should demonstrate international leadership on climate change by ensuring meaningful emissions reductions; creating flexible mechanisms for technology deployment and emissions trading; and participating in international negotiations, including putting forth a proposal for a revised Kyoto Protocol.

Subtitle B – Climate Change Strategy

Establishes a National Office of Climate Change Response in the Executive Office of the President to develop a U.S. climate change response strategy, and establishes an interagency task force to serve as the primary mechanism for agencies to work together to develop and implement national climate change policy. Establishes an Office of Climate Change Technology in the DOE, with a $4.75 billion research and development budget over the period of FY 2002 to FY 2011. Establishes an independent review board to monitor the development and implementation of national climate change response strategy. Authorizes the establishment of other climate-change-related offices in other federal agencies, as necessary.

Subtitle C – Science and Technology Policy

Requires a focus on global climate change in the Office of Science and Technology Policy through amendments to the National Science and Technology Policy, Organization, and Priorities Act of 1976 and amends the National Science and Technology Policy, Organization, and Priorities Act of 1976 to add a fifth Associate Director in the Office of Science and Technology Policy.

Subtitle D – Miscellaneous Provisions

Requires agencies that propose actions that result in a net increase in greenhouse gas emissions to indicate what policies or measures will be undertaken to offset or mitigate the increased emissions and requires the Secretaries of Energy, Agriculture and Commerce and the Administrator of the Environmental Protection Agency to develop and publish a methodology for preparing estimates of annual net greenhouse gas emission from all Federal facilities.

TITLE XI – GREENHOUSE GAS DATABASE

Requires the President, acting through the Council on Environmental Quality, to direct the Departments of Commerce, Energy, Transportation and Agriculture and the Environmental Protection Agency to enter into a Memorandum of Agreement that clarifies their authority with regards to the comprehensive collection and analysis of data on greenhouse gas emissions related to energy production and use and requires the Departments of Commerce, Energy, Transportation, and Agriculture and the Environmental Protection Agency to design a national greenhouse gas database consisting of an inventory of emissions from significant sources and a registry of voluntary reductions. However, it also requires mandatory reports from any entity with greater than 10,000 metric tons of carbon dioxide equivalent greenhouse gas emissions.

Requires the Departments of Commerce, Energy, Transportation, and Agriculture and the Environmental Protection Agency to develop and promote measurement and verification methods and standards for greenhouse gas emissions and emission reductions, and review and revise as needed and requires a GAO review every 5 years of the implementation and operation of this Title, and make recommendations to achieve a consistent and technically accurate record of greenhouse gas emissions, reductions and atmospheric concentrations. The title also requires the Departments of Commerce, Energy, Transportation, and Agriculture and the Environmental Protection Agency to jointly enter into agreements with the National Academy of Sciences to review the scientific methods, assumptions and standards used in implementing this Title, and report to Congress within four years of enactment with recommendations for improvement of the reporting and registry system.

DIVISION E – ENHANCING RESEARCH, DEVELOPMENT, AND TRAINING

TITLE XII – ENERGY RESEARCH AND DEVELOPMENT PROGRAMS

Establishes a framework for a comprehensive energy research, development, and deployment program to reduce energy intensity by 1.9 percent each year through 2020, to reduce total energy consumption by 8 quadrillion Btu by 2020 from otherwise expected levels, and to reduce carbon dioxide emissions from expected levels by 166 million metric tons by 2020.

Subtitle A – Energy Efficiency

Sets technology goals and authorizes funding from $700 million in FY 2003 to $983 million in FY 2006 for DOE energy-efficient housing, industrial energy efficiency, and transportation energy efficiency programs and authorizes up to $50 million annually for a competitive grant program to foster research relating to energy efficiency. Requires an annual report to Congress on program activities.

Establishes a public-private research partnership to improve railroad locomotive technologies by increasing fuel economy, reducing emissions, improving safety, and lowering costs. Additional authorizations of $60 million in FY 2003 and $70 million in FY 2004 are provided.

Subtitle B – Renewable Energy

Authorizes funding from $500 million in FY 2003 to $733 million in FY 2006 for DOE wind power, photovoltaics, solar thermal, biomass and biofuel, geothermal, hydrogen, hydropower, and electric energy systems and storage programs.

Subtitle C – Fossil Energy

Increases funding from $485 million in FY 2003 to $558 million in FY 2006 for coal, oil, natural gas, and transportation fuels programs and authorizes $200 million per year from FY 2003 to FY 2011 for demonstrations of carbon sequestration, gasification, and other technologies to improve the environmental performance of coal-based electricity generation.

Establishes a program of research, development, and demonstration of ultra-deepwater resource exploration and production technologies, including the development of next-generation architectures for ultra-deepwater resource production and creates a program to maximize the ability to recover unconventional onshore natural gas resources.

Subtitle D – Nuclear Energy

Authorizes funding for nuclear energy R&D programs ($100 million in FY03 to $130 million in FY06) and for supporting infrastructure in the DOE complex ($200 million in FY03 to $212 million in FY06).

Subtitle E – Fundamental Energy Science

Authorizes funding for programs in the DOE Office of Science (except for climate change science, separately authorized below) from $3.785 billion in FY 2003 to $5.0 billion in FY 2006, and authorizes $335 million for fusion energy sciences research in FY03.

Subtitle F – Energy, Safety, and Environmental Protection

Authorizes ($25 million for FY03, increasing to $28 million by FY06) a program to include analysis of energy infrastructure interdependencies;, probabilistic risk assessment of unconventional and terrorist threats; incident tracking and trend analysis tools; and integrated multi-sensor, warning, and mitigation technologies to detect, integrate, and localize events affecting energy infrastructure. Authorizes a pipeline safety research and development program to ensure the integrity of natural gas and hazardous liquid pipelines and authorizes a research and demonstration program for remediation of groundwater contaminated by energy activities is authorized at $10 million per year for FY 2003 through FY 2006.

TITLE XIII – CLIMATE CHANGE-RELATED RESEARCH AND DEVELOPMENT

Subtitle A – Department of Energy Programs

Authorizes $150 million in FY 2003, increasing to $230 million in FY 2006, for DOE climate change science research programs in climate modeling, carbon cycle research, ecological processes, and integrated assessment. Provides conforming amendments to the Federal Nonnuclear Research and Development Act of 1974.

Subtitle B – Department of Agriculture Programs

Authorizes $25 million for each of fiscal years 2003 through 2006 for Department of Agriculture basic and applied research related to carbon sequestration in soils and forests. Authorizes $10 million for each of fiscal years 2003 through 2006 for development of monitoring programs and carbon sequestration demonstration projects.

Subtitle C – Clean Energy Technology Exports Program

Establishes an interagency working group to coordinate and promote U.S. government efforts to open overseas energy markets and transfer U.S. clean energy technology to developing countries, and countries in transition, that are expected to experience, over the next 20 years, the most significant growth in energy production and associated greenhouse gas emissions. Requires an annual report describing technology, policy, and market opportunities for international development, demonstration, and deployment of clean energy technology. Requires all U.S. government entities supporting activities in the energy and environment sectors of such countries to support the transfer of U.S. clean energy technology to the maximum extent practicable.

Subtitle D – Climate Change Science and Information

Part I – Amendments to the Global Change Research Act of 1990

Calls for the U.S. Global Change Research Program (USGCRP) to develop a strategic research plan for the 10-year period beginning in 2002 and establishes the Integrated Program Office for the Global Change Research Program in the Office of Science and Technology Policy, which is responsible for: interagency coordination and integration of programs; ensuring federal programs and activities under the Program meet goals and objectives of the strategic plan; ensuring budget and program recommendations are communicated to the President; and reviewing and providing recommendations on annual appropriations requests from federal agencies participating in the program.

Part II – National Climate Services and Monitoring

Directs the Secretary of Commerce to submit a plan of action to Congress for the National Climate Service within one year of enactment of this Act. The plan is to provide recommendations and funding estimates for: 1) a national center for operational climate monitoring and prediction with the capability to monitor and adjust observing systems as necessary, (2) a national climate observing system, (3) establishment of a nationally coordinated modeling strategy, including a national climate modeling center that will provide a dedicated capability for high-end climate modeling; (4) modeling and assessment capabilities to predict regional and local climate changes and impacts, (5) coordination with the private sector, (6) long-term development and maintenance of climate products and efficient access to relevant climate data; and (7) mechanisms to coordinate with federal agencies, state and local entities, and the academic community.

Part III – Ocean and Coastal Observing System

Requires the President, through the National Ocean Research Leadership Council, to establish and maintain an ocean and coastal observing system to provide continuous, real-time observations. The Council is required to submit an implementation plan to Congress within 6 months after enactment of this Act, and is also tasked with coordinating federal ocean observing activities and working with potential users of the system to make effective use of its capabilities. In addition, the Council is responsible for approving standards and protocols for administration of the system. $235 million in FY03, increasing to $445 million in FY06 is authorized for operation of the ocean and coastal observing system.

Subtitle E – Climate Change Technology

Directs the National Institute of Standards and Technology (NIST) to develop measurements, calibrations, standards, and technologies that will enable reduced production of greenhouse gases and requires the Secretary of Commerce to initiate an interagency effort to develop standards and measurement technologies to calculate greenhouse gas emissions and reductions from agriculture, forestry, and other land use practices; non-CO2 greenhouse gas emissions from transportation; and greenhouse gas emissions from facilities or sources using remote sensing technology.

Authorizes $10 million for each of fiscal years 2002 through 2006 for National Institute on Standards and Technology activities under sections 1345, 1351, and 1361 through 1363.

Subtitle F – Climate Adaptation and Hazards Prevention

Part I – Assessment and Adaptation

Directs the Secretary of Commerce, in coordination with appropriate federal, state, and local governmental entities, to establish a Climate Vulnerability and Adaptation Program to perform regional vulnerability assessments and develop preparedness plans to address safety, ecological, and economic impacts related to increased climate variability.

Requires the Secretary of Commerce to conduct regional and long-term assessments of the vulnerability of coastal areas to hazards associated with climate change, climate variability, and sea level rise; requires a

National Coastal Adaptation Plan that will recommend national and regional strategies for adapting to coastal impacts associated with climate change. Provides Coastal Adaptation Grants to eligible States that require a graduated State match (growing to 1 to 1 by the fourth year). Initiates a 4-year pilot program to assist coastal communities most adversely affected by climate change or climate variability, and authorizes $3 million annually for regional assessments, and $3 million annually for coastal adaptation grants.

Part II – Forecasting and Planning Pilot Programs

Establishes a program of NASA/NOAA grants to use geospatial information to plan for adaptation to changes that may result as a consequence of global climate change or climate variability; directs NOAA's Coastal Services Center to establish and maintain an electronic, Internet-accessible database of the results of each pilot project; authorizes $17.5 million for FY02, increasing to $25 million for FY06.

TITLE XIV – MANAGEMENT OF DOE SCIENCE AND TECHNOLOGY PROGRAMS

Requires cost-sharing of applied technology projects (20 percent) and demonstration and deployment projects (50 percent), but not basic research; requires independent merit review of all R&D proposals and mandates the creation and use of external technical advisory committees for DOE science and technology programs. Where such panels already exist, they are to remain in use.

Creates an Under Secretary for Energy and Science to oversee and coordinate DOE civilian energy R&D. Also, gives DOE more flexible procurement authorities, requires study by the National Academy on accelerating innovation for energy technology, and requires reports on technology readiness and barriers to technology transfer.

TITLE XV – PERSONNEL AND TRAINING

Requires DOE to monitor workforce trends in energy employment and authorizes traineeship grants to help alleviate labor shortages in particular areas. The Secretary may establish fellowships to attract and retain outstanding scientists and engineers in energy research and development. The Secretary must work with utilities and unions on training guidelines to support increased electricity reliability.

DIVISION F – TECHNOLOGY ASSESSMENT AND STUDIES

TITLE XVI–TECHNOLOGY ASSESSMENT

Creates a Science and Technology Assessment Service to provide ongoing science and technology assessment advice to Congress. Assessment work would be performed using the services of experts selected in consultation with the National Research Council.

TITLE XVII–STUDIES

Requires each federal agency to report to Congress within one year and at least every five years necessary regulatory changes to improve market entry for energy-efficient technologies and processes. Also provides for a study of Hawaii's energy needs and for a study on siting power lines on AMTRAK rights of way.

DIVISION G – ENERGY INFRASTRUCTURE SECURITY

TITLE XVIII – CRITICAL ENERGY INFRASTRUCTURE

Subtitle A – Department of Energy Programs

Amends the Department of Energy Organization Act to clarify that energy infrastructure security is part of the Department's mission.

Authorizes the Secretary of Energy to establish programs of financial, technical, and administrative assistance related to critical energy infrastructure security, consistent with overall national infrastructure security plans of the President and establishes a broad-based advisory committee to review DOE policy and activities to improve energy infrastructure security.

Subtitle B – Department of Interior Programs

This subtitle establishes an Outer Continental Shelf (OCS) Energy Infrastructure Security Program, administered by the Secretary of the Interior. States in proximity to leased OCS tracts and their political subdivisions will receive funding to carry out activities pursuant to approved plans.

ADMINISTRATION POSITION

No Statement of Administration of Position had been issued at the time of publication of this Notice, but it is anticipated to be issued later this week. However, the Administration has publicly announced positions on a number of topics contained in the Daschle/Bingaman substitute. For example, the Administration supports a SEER of 12 for air conditioners and heat pumps as issued by DOE, and opposes the higher 13 SEER standard because DOE's analysis has shown that the incremental costs of the higher standard will exceed consumer benefits in terms of energy cost savings. Likewise, the Administration favors opening ANWR to oil and gas exploration to enhance conventional domestic energy supplies; supports extending the Price Anderson Act to cover NRC licensees; opposes the CAFE language in the substitute, in part because it provides for Congress to set new CAFE standards instead of NHTSA; supports retention of the electricity title, and opposes amendment of the Clean Air Act in the context of this legislation. For a complete understanding of the Administration's energy policy proposal, visit the White House web site for an online version of the President's energy proposal.

COST

No Congressional Budget Office cost estimate was available at the time of publication.

POSSIBLE AMENDMENTS

A large number of amendments, perhaps as many as 200 or more, can be anticipated to many provisions in the Daschle/Bingaman substitute including amendments regarding Clean Air Act New Source Review rules, Climate Change, tax provisions, electricity restructuring, expansion of the ethanol mandate, air conditioner/heat pump efficiency standards, funding for renewable energy, to name only a few. Here are a handful that we're aware of.

Baucus/Grassley.	Finance Committee package of energy tax provisions. (See a brief description on p. 3 of this Notice.)
McCain.	S. Amdt. No. 2918: the "Pipeline Safety Improvement Act of 2002" (Note: the text of the amendment is S. 235, a bill which passed the Senate on February 8. 2001 (see RVA # 11 of 2001).

Levin/Carnahan/ Bond/Voinovich.	Regarding Corporate Average Fuel Economy (CAFE) standards.
Mukowski.	Opening a portion of the Alaska National Wildlife Refuge to natural gas and oil exploration.
Hagel/Craig/ Murkowski.	Substituting new language on Climate Change for Titles X, XI, and XIII of the Daschle substitute.
Gramm/Kyl.	Amending the Baucus/Grassley tax amendment to eliminate the federal estate tax.
Jeffords.	Increase the Renewable Portfolio Standard (RPS) to 20 percent of total sales by 2020 (the Daschle substitute requires 10 percent).
Unknown.	Strike the electricity title.
Inhofe/Bingaman.	Re. hydraulic fracturing.

The RPC will provide timely information on all major amendments to the energy bill by e-mail to Republican Legislative Staff Directors.

RPC Staff contact: John Peschke, 224-2946